

IN THE CLAIMS

Please amend the claims as follows:

1. (currently amended): A fixed-bed multitubular reactor, comprising:
a plurality of reaction tubes to be packed with a catalyst; ~~and~~
catalyst temperature measures equipped to measure the temperature near the centre
part in the radial direction of the reaction tubes;
at least a portion of said plurality of reaction tubes being arranged so as to be adjacent
to each other to form at least one reaction tube group; and
the catalyst temperature measures being installed in ~~each of a part or~~ all of the
plurality of the reaction tubes or at least a part of said reaction tubes forming said at least one
reaction tube group, the measurement positions thereof being different from each other in the
longitudinal direction of the reaction tubes.

2. (original) The fixed-bed multitubular reactor according to claim 1, wherein the
catalyst temperature measurers are equipped in 5 to 35 tubes out of a reaction tube group
comprising 5 to 105 reaction tubes adjacent to each other.

3. (currently amended): The fixed-bed multitubular reactor according to claim 2,
wherein flow patterns of a heat medium are different in the reactor, and a plurality of the
reaction tube groups are provided and respectively allocated to the positions where the a flow
patterns of the a heat medium are ~~flowing outside of each reaction tube group~~ is different.

4. (currently amended): A ~~The~~ fixed-bed multitubular reactor ~~according to claim 1,~~
~~wherein the reactor is~~ which is used for a gas-phase catalytic oxidation reaction, comprising:

a plurality of reaction tubes to be packed with a catalyst;
catalyst temperature measures equipped to measure the temperature near the centre
part in the radial direction of the reaction tubes;
at least a portion of said plurality of reaction tubes are arranged so as to be adjacent to
each other to form at least one reaction tube group; and
the catalyst temperature measures being installed in all of the plurality of the
reaction tubes or at least a part of said reaction tubes forming the reaction tube group, the
measurement positions thereof being different from each other in the longitudinal direction of
the reaction tubes.

5. (original) The fixed-bed multitubular reactor according to claim 4, wherein the gas-phase catalytic oxidation reaction is a reaction synthesizing an unsaturated aldehyde or an unsaturated carboxylic acid from propylene, isobutylene or tertiary butyl alcohol.

6. (original) The fixed-bed multitubular reactor according to claim 4, wherein the gas-phase catalytic oxidation reaction is a reaction synthesizing an unsaturated carboxylic acid from an unsaturated aldehyde.

7. (New) The fixed-bed multitubular reactor according to claim 1, wherein a plurality of the heat-medium bath temperature measures is equipped corresponding to the catalyst temperature measures so that the measurement positions Q thereof are set at the same height as the measurement positions P of the catalyst temperature measures.

8. (New): The fixed-bed multitubular reactor according to claim 1, wherein a plurality of the reaction tubes groups are allocated circularly and at least one reaction tube

group is allocated in each section L which is made by separating the cross section of the reactor in the radial direction from the centre M into two or more sections having the same area.

9. (New): The fixed-bed multitubular reactor according to claim 1, wherein the length of the reaction tube is 2 to 7 meters.

10. (New): The fixed-bed multitubular reactor according to claim 1, wherein the setting interval of the catalyst temperature measures is from 0.1 to 2 meters.

11. (New) The fixed-bed multitubular reactor according to claim 1, comprising a plurality of reaction tube groups arranged in a triangular configuration.

12. (New) The fixed-bed multitubular reactor according to claim 1, comprising a plurality of reaction tube groups arranged in a square configuration.